

REMARKS

I. STATUS OF THE CLAIMS

Claim 4 is canceled.

In view of the above, it is respectfully submitted that claims 1-3 and 5-21 are currently pending.

II. REJECTION OF CLAIMS 1-24 UNDER 35 USC 101

Independent claim 1 recites automatic translation of extracted data to a non-object format. Independent claims 2, 19, 20 and 21 recite automatically building a non-object database. Independent claims 8 and 11 recite automatically inserting extracted data into tables.

Independent claims 13 and 16 recite inserting extracted data into tables. Independent claim 17 recites automatically building relational database tables, and loading the tables.

Clearly, these recited features are concrete, useful, tangible results. The usefulness of such results can be understood from the Description of the Related Art section of the application.

In view of the above, it is respectfully submitted that the rejection is overcome.

III. REJECTION OF CLAIMS 1-2 AND 19 UNDER 35 USC 102(B) AS BEING ANTICIPATED BY SHEN

Claim 1 is amended to recite that the object model stores data in a database, and that the data is automatically extracted *directly* from the object model *using an object query language corresponding to the object model*. Support for the amendments is found, for example, in FIGS. 2 and 3, and the disclosure in paragraphs [0029]-[0041] of the specification.

For example, FIG. 3 discloses an object model 22 which stores data in a database 20. As shown in FIG. 3, data is automatically extracted *directly* from object model 22 *using an object query language (OQL) corresponding to the object model*. For example, in FIG. 3, please see the line from element 54 to object model 22, with the notation "OQL". This operation in FIG. 3 can be compared to the prior art in FIG. 1 of the present application, where an export engine 34 exports data from database 20, not from object model 22. See, for example, paragraph [0008] of the specification.

Shen discloses the conversion of object oriented models into a database.

However, in Shen, the actual object model is converted. For example, in FIG. 1 of Shen, data input 14 is a file generated from a computer drawing program, and is indicative of identified

relationships among database objects. See, for example, the Abstract, and column 3, lines 5-26, of Shen.

Therefore, in Shen, the actual object model is converted. This is different than the present invention as recited, for example, in claim 1, where the object model stores data in a database, and the data is automatically extracted directly from the object model.

Further, since Shen converts the actual object model, it is respectfully submitted that the operations between data input 14, modeler 16 and compiler 20 of Shen do not use an object query language for the conversation in the manner recited, for example, in claim 1 of the present application.

Therefore, it is respectfully submitted that the amendments to claim 1 clarify the differences over Shen.

The above-arguments are specifically directed to claim 1. However, it is respectfully submitted that the arguments would be helpful in understanding various differences of various other claims over Shen.

In view of the above, it is respectfully submitted that the rejection is overcome.

IV. REJECTION OF CLAIMS 3-18 AND 20-21 UNDER 35 USC 103 AS BEING UNPATENTABLE OVER SHEN IN VIEW OF NG

The arguments in Section III, above, for distinguishing over Shen, also apply here.

Ng discloses mapping rules for use in mapping data between a relational model and an object model. A programmer enters the mapping rules, and a mapping tools converts data between the relational model and the object model according to the mapping rules. See, for example, the Abstract, and column 3, lines 32-39, of Ng.

By contrast, in the present invention as recited, for example, in claims 8, 11, 13 and 16, tables are built for extracted data *in accordance with metadata for the extracted data*, the tables being tables for a target relational database. Ng does not disclose or suggest such use of metadata to build tables. Instead, Ng relates to mapping rules provided by a programmer. In this sense, Ng can be seen as teaching away from the present invention as recited, for example, in claims 8, 11, 13 and 16.

In view of the above, it is respectfully submitted that the rejection is overcome.

V. CONCLUSION

In view of the above, it is respectfully submitted that the application is in condition for allowance, and a Notice of Allowance is earnestly solicited.

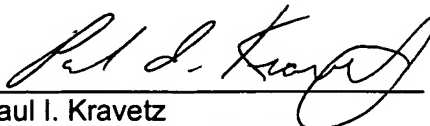
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If any further fees are required, please charge such fees to our Deposit Account No. 19-3935.

Respectfully submitted,

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